

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listing, of claims in the application:

Listing of Claims

1. (Currently Amended) A device to protect the neck and the base of the skull of a person while allowing unimpeded motion of the person's head, either side to side or front-to-back , the device comprising:
 - a) a free-hanging first impact-resistant pliable substrate whereby said substrate ~~is~~ encircles an extended portion of the back of the person's neck and wherein said substrate hangs downwardly from under any head covering of the person to approximately the person's ~~extends upwardly from approximately the wearer's~~ first thoracic vertebra ~~to the base of the cranium~~ where it ends in a free-hanging unfastened depending end, forming a zone of unbroken neurological protection along ~~to~~ the back of the neck; and
 - b) straps extending from said first substrate and comprising means allowing closure of the straps around a ventral region of the neck.
2. (Currently Amended) The device as recited in claim 1 wherein the closure of the straps results in the juxtaposition of a rigid planar substrate overlying the person's trachea, wherein the planar substrate is attached to one of said straps and whereby the a reversible deformable second substrate is juxtaposed in proximity to said first substrate and makes contact with the wearer at multiple and distinct locations thereby distributing force of any impact to the first substrate between the multiple and distinct contact locations.
3. (Cancelled)

4. (Previously Presented) The device as recited in claim 1 further comprising a means for reversibly attaching to a helmet thereby forming a zone of unbroken neurological protection from the tip of the head of the wearer to middle of shoulder blades.

5. (Previously Presented) The device as recited in claim 1 wherein the device is integrally molded to a helmet thereby forming a zone of unbroken neurological protection from the tip of the head of the wearer to middle of shoulder blades.

6. (Cancelled)

7. (Currently Amended) The device as recited in claim 4 2 wherein the second substrate comprises a plurality of reversibly deformable substrates.

8. (Currently Amended) The device as recited in claim 4 2 wherein all the first substrate, the second substrate, and the straps are radio-translucent.

9. (Original) The device as recited in claim 2 wherein the first substrate is defined by an arcuate outer shell overlaying a cushioning substrate.

10. (Currently Amended) The device as recited in claim 4 2 wherein the second substrate further comprises reversibly deformable material which is integrally molded with said first substrate.

11. (Currently Amended) The device as recited in claim 4 2 including a means for regulating fluid flow through the second substrate.

12. (Currently Amended) The device as recited in claim 4 2 wherein the first substrate and the second substrate are integrally molded to each other.

13. (Currently Amended) The device as recited in claim [[3]] 2 wherein the second substrate defines recesses to removably receive a hot-pack or a cold-pack.

14. (Original) The device as recited in claim 1 wherein said first substrate extends to a region below the person's seventh vertebra.

15. (Previously Presented) The device as recited in claim 1 wherein the first substrate defines recesses to reversibly receive a hot-pack or a cold-pack.

16. (Currently Amended) A device for imparting uninterrupted physical protection and predetermined temperature to the back of a wearer's skull and neck while allowing unimpeded motion of a person's the wearer's head, either side to side or front-to back, the device comprising:

a free hanging first impact-resistant pliable substrate extending from under a helmet worn by the wearer to the wearer's first thoracic vertebra where the substrate ends in a free-hanging unfastened depending end ~~to the lower cranium~~;

a second substrate integrally molded to and underlaying the first substrate and extending along lateral portions of the neck, whereby said second substrate is less rigid than said first substrate and further said second substrate features apertures and cavities to receive fluid; and

a means for positioning cold packs or hot packs within the device so as to effect the temperature of the neck, thereby imparting physical protection and predetermined temperature to the human neck.

17. (Cancelled)

18. (Previously Presented) The device as recited in claim 16 wherein the positioning means is a cavity defined by a portion of the second substrate, wherein the cavity defines recesses to receive the cold packs or hot packs.

19. (Original) The device as recited in claim 16 wherein the second substrate further comprises a plurality of straps, each of said straps terminating with complementary closure means and each of said straps having a length sufficient to encircle the front of the neck so as to facilitate engagement the closure means.

20. (Original) The device as recited in claim 19 further comprising a third substrate attached to one of said straps such that when the straps encircle the neck, the third substrate directly overlays a tracheal region of the neck.

21. (Previously Presented) The device as recited in claim 1 wherein at least a portion of said first and second substrates extend along at least a portion of a dorsal surface of the person's neck.

22. (Currently Amended) A device to provide uninterrupted protection to a neck and the base of the skull of a person while allowing unimpeded motion of the person's head, the device comprising:

a) a first impact-resistant pliable substrate, whereby at least a portion of said substrate extends along at least a portion of a dorsal surface of the neck wherein the substrate ends with a free-hanging depending end left unfastened, thereby protecting the person's rear sections of the head starting with the brainstem to the person's thoracic vertebrae; and

b) straps extending from said substrate and comprising means allowing closure of the straps around a ventral region of the neck, thereby protecting the neck and base of the skull of the person.

23. (Previously Presented) The device as recited in claim 22 wherein at least a portion of said substrate extends along said dorsal surface between the person's thoracic vertebra to approximately a base of the skull.

24. (Previously Presented) The device as recited in claim 1 wherein the impact-resistant pliable substrate is shaped as a removable shield used in combination with,

and reversibly attached to a protective headwear to confer uninterrupted protection from top of a wearer's head to below the wearer's seventh vertebrae.

25. (Previously Presented) The device as recited in claim 1 wherein the straps include a detachable tracheal shield to facilitate access to the ventral region of the wearer's neck.

26. (Currently Amended) The device as recited in claim [[3]] 2 wherein the second substrate comprises reversibly deformable substrates only on the edges of the outer substrate.

27. (Previously Presented) The device as recited in claim 22 wherein the straps include a detachable tracheal shield to facilitate access to the neck ventral region.

28. (Previously Presented) The device as recited in claim 16 further comprising an upwardly extending end adapted to attach to a helmet and a downwardly descending end which is free hanging.